1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

The manner of butchering a deer is stereotyped. To remove the [253]
hide, cuts are made encircling the neck just back of the head, down the belly to the tail, inside the legs, and around the hocks, taking the tail with the hide, but leaving the head and hoofs on the carcass. If the headskin is desired as part of the hide, the belly slit is continued to the lower lip, and additional cuts are made around the base of the antlers, then on a line joining them, and from this line down the middle of the face to the upper lip. The skin is folded flesh side in to prevent it drying out while it is being carried to camp. One who kills a deer owns its hide [224]
and flesh, but he is obliged to give certain portions to those who accompany him, should they want them; to wit, both hams (cut close to the spine and well down on the leg) and the rib section. He reserves for himself particularly the skin and the section along the backbone containing the long trachea. This is said to divide the carcass into four equivalent portions. Anyone may have the legs and viscera which remain. Brains and marrow from the spinal canal are collected for tan- [237]
ning, antlers to furnish picks for digging clay and flaking pumelaes for arrowheads, shoulders for rattles, and sinews for bowstrings, sewing, etc. Mountain sheep horns are taken for ladles and arrow wrenches.

Cotton-tail and jack-rabbits, coyotes, and wildcats are tracked in the [251]
snow for the sake of their pelts which furnish warm robes and bedding.

I (Hayvilla) used to stay in Cataract Basin in the winter. I was then a grown man. There was a little snow covering the ground. I and another man went out to hunt deer on the plateau. We saw no deer tracks but we found those of a bear. We followed these and after a short distance we saw the bear walking ahead. We followed him; he did not turn around. We hid behind a big dead cedar tree which was lying on the ground about fifteen metres from where the bear stopped. The bear did not turn around; he was busy digging up the ground. First I shot at him with a gun and the other man shot too; we both hit him and he fell dead. We waited a little and, as the bear did not move, we loaded again and approached quietly pointing the guns at him. When we were within a few yards of the bear, which lay still, we both shot again. Then we took hold of his leg gingerly and pulled it. We said, "It is dead," and then we skinned it. We did not cut the flesh, just carried the skin home. We kept it, but did not know what to do with it, so eventually we threw it away. A long time ago the old folks ate bear meat, but I never saw it eaten in my lifetime. [262]

I killed three bears. The second occasion was when I wanted to go and see the new town of Williams; there were few hunters there. When we were west of Bird Lake — there were four or five men — we wanted to stop and hunt deer in the little mountains. Two of us went right to the top of a little mountain; we took up a position where the deer trails crossed. We wanted some of the others to go around the far side of the mountain, where, by making a little noise, they could chase the deer to the spot where we were waiting. We had been there only a little while, when we heard something running toward us. We thought perhaps it was a buck. Then we saw it running out of the trees. It was a bear; he was running straight at us. We felt afraid

323 has burned down, the coals are raked away from the center, the pot set right side up on the ground, and buried, inside and out, in coals. A small amount of brush is then set ablaze on top of this, presumably to create a draft. After baking all day and night, the pot may be removed next morning. Only one pot is fired at a time. These vessels are said never to have cracked in firing.

[252] Ceremonial mush is always the first thing cooked in the vessel. A ladle full is given to every comer, more being cooked in the same pot as the supply wanes, in the spirit of ascribing inexhaustibility to it. Pots are supported on three stones when cooking.

[356] Sometimes the bottom burns when cooking so that fine cracks appear, although the vessel does not break. A sort of "alkaline clay,"[1] obtained from the creek bed, is smeared over the faulty spot, beyond which no further attention is required.

[439] Pottery is obtained from the Hopi for storage uses, but not for cooking.

[27[illegible]] Clay pipes (*[illegible]*) are made of material obtained from the creek bed. The bowl, 5 cm. high, is fitted with an arrow reed stem, 7.5 in. long, in the side. Cigarettes (*[illegible]*) are made of cornhusk, but not of reeds.

Skin Dressing

281 [962] [43?] A Havasupai man's sole specialized product is the tanned deerskin. It is strictly a sex-limited industry, the handling of the skin from flaying the carcass to the finished moccasin or woman's dress is man's work alone. It is also the chief article of trade, which is, on the whole, another male activity.[2]

The fresh skin is stretched on the ground hair side down, with large stones on the neck, tail, and legs, and with smaller ones along the edges. After four or five days of drying in the sun it is as stiff as a board. If the skin contains much fat, it is dried in the shade, otherwise it will putrefy. The rawhide is sprinkled with water until it can be rolled into a loose cylinder, in which condition it can be stored for future use for as long as three or four months, by which time the insects will have gotten at it.

To dehair the rawhide, it is tied down in the creek to soak for a day and night. Dehairing commences with the dawn the next day, not because the sun would dry the hide, but because the process is laborious.

[1] [illegible]: the creek is heavily charged with lime salts.
[114] [2] Cushing observes that these people are famous among other Indians for their tanning (p. 560). I fail to see any superiority over the products of neighboring tribes, or those of other North American Indians represented in museum collections.

1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

● 281 The hide is hung over a smooth pole, 5 cm. diameter, which rests slanting against a tree. The hide is caught between pole and tree. The hair and pigmented layer are removed with the beaming tool grasped in both hands and drawn down the pole toward the body. The hair is frequently left on the legs, though it is just as convenient to dehair them or cut them off at once. Loose tissue is also removed from the flesh side. The [442] beaming tool is a deer cannon-bone or hip-bone broken lengthwise and sharpened. Now a horse rib, naturally sharp on its concave edge, is

[447] [291]

Fig. 47. Wringing a Deer Hide.

substituted. Dehairing takes about two hours. The hide is hung on a pole to dry in the sun for a day or so.

When ready for tanning, the stiff skin is soaked in the creek over night, but no longer. It is then rubbed thoroughly pliable in the hands, wetting it with warm water. Folded lengthwise flesh side out, the neck is looped about a post, the legs around a stick, and both are folded back inside the skin. Twisting the stick wrings the skin dry. (Fig. 17.) It is now stretched by pulling at the edges and rubbing it together everywhere [442] until entirely freed of wrinkles. A skewer threaded in little slits which

1:Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

have been cut along each border of the neck, aids in stretching this tough section of the hide. Excess moisture is scraped off.

Tan has been previously prepared. Fresh deer brains are roasted and mixed into a ball of yucca fiber. The raw marrow from the spinal canal is mixed into another ball. After being dried on the coals, these will keep indefinitely. The brain is used before the marrow. The brain and marrow of a single deer is ample to tan its hide; half is sufficient, but if the skin is not soft enough, more must be used.

One of these balls is worked up in cold water into a soapy liquor. Spraying mouthfuls of this over the hair side, as well as the flesh side at the ends, the skin is rolled up from the neck and tail inward. The legs which protrude from the double roll are wrapped around it to prevent drying out. After being set aside long enough for the tan to soak through, it is spread in the sun, hair side up, to dry somewhat. Now it is straightened, hung over a rail in the sun, and vigorously rubbed and pulled until soft and pliable. The seated tanner catching the skin under his feet stretches it in every direction. Rubbing and working with the fingers creates considerable friction which presumably melts the grease well into the pores. After a second working over the whole surface, it is laid flesh side up to dry in the sun. While rubbing the skin, at which several friends may help, they sing:—

Wätim'a wa'a'ŋadj (a hero's name)	ahäwamuhavi he walks up in the water (i.e., the Colorado).

ya'i'vu'i'wäh'

This completes the tanning, which occupies the day. During the whole process care has been taken to prevent the white skin from being soiled, resting it on an old blanket or heap of leaves. Skins are traded while yet a little stiff, i.e., without the final rubbing,* presumably because the fineness of finish depends solely on the amount of labor one wants to expend on it—and this is left to the ultimate consumer.

If it is desired to stretch the skin somewhat, little slits are cut entirely around its edges, and it is buried in damp earth over night, and pegged out in the morning. Moccasins, etc., which stiffen after a wetting, are similarly buried over night and worked pliable in the hands next day.[1]

Mountain lion and deerskins are also tanned with the hair on. The skin is flushed, after a little water is blown over the flesh side to soften it. (It must never be soaked.) After brain tan is sprayed over the flesh

[1] The Navaho bury moccasins in the earth to make them pliable (Franciscan Fathers, 1910).

1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

side, it is rolled up, set aside, and later worked as described above. As the skin contains considerable fat, it must be dried in the shade. A second tanning is then given, using the spinal canal marrow. As 281

Tools

Fire Tools. Inasmuch as cooking is a day-long process there is usually a fire within easy reach. But fire may be readily obtained with palm drill or strike-a-light. 372

The firedrill (*o'ogádid; o'o*, fire) consists of hearth and drill. The hearth (*hatu'gúvdg*) is a section of the dry flower stalk of bear grass (*Nolina microcarpa* S. Wats., *há'tugádá*), which grows on the talus slopes. This is flattened on opposite sides and provided on one face with pits (*ma'dáp*) adjacent to notches in one edge (Fig. 18). The drill (*gatá*) of dry mesquite root is straightened, trimmed, and rubbed down to a diameter of one centimeter. Beargrass and mesquite root are the best materials; others may be used, the only requisite being that they are

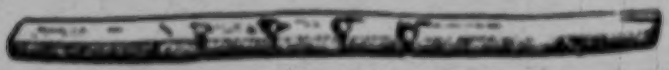

Fig. 18 (20.2-1234). A Firedrill Hearth.

thoroughly dry. Hearth and drill are made in two sizes. For ordinary uses about the camp, the hearth measured 25 cm. in length, the drill 60 cm. When traveling the drill is carried in the quiver, with the hearth in its own case tied to the outside. But by preference shorter sticks, each 15 cm. long, are carried together in a special case. The short drill is then substituted for the foreshaft of an arrow in order to lengthen it for use. The operator is usually seated with knees drawn up, holding the hearth on a flat stone beneath his feet. A pinch of sand is placed in the drill pan. The drill is rotated between the palms in the familiar manner, exerting considerable downward pressure; when the hands reach the lower end of the drill they are quickly returned to the top. The wood dust falls through the adjacent notch on to the stone; rubbed, dry cedarbark serves as tinder. A demonstration with a somewhat green drill took about a minute to produce a glowing coal. (Obviously two men drilling together can reduce this time materially. The pumpdrill is not used.

The strike-a-light has a native form. A white stone (*ddgi'alwid*, pyrites?) is held, together with the tinder, in one hand, and struck with a flint knife. The only tinder used is cotton (*hádjdwi*) grown from seeds

1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

several days, being taken indoors at night; they require attention during this period. As many as twenty or thirty arrows were kept at a time in quivers. 411

The best quiver (*n,épáud*) is made of mountain lion skin.[1] Only rich men have these; poor men are satisfied with the hide of fawns or of the young of mountain sheep. The tanned lion skin is folded lengthwise hair side out and cut as shown in Fig. 20. The edges are turned back outside and sewed together with a running stitch. A circular piece of thick buckskin is sometimes sewed into the base (the neck) end, like the end of a can. A stick of the diameter of an arrow is placed in the 281 411 [556]

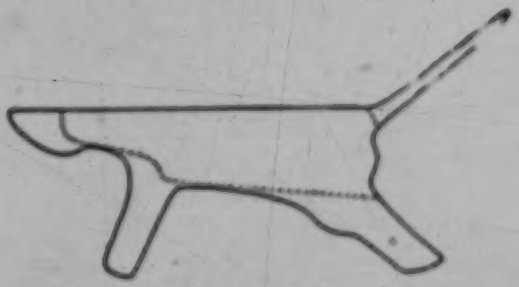

Fig. 20 (30.2-1931). The Pattern for a Mountain Lion Quiver. Based on the specimen shown in Fig. 22.

longitudinal seam where it is bound in with an over and over stitch. The tail hangs free as an ornament. Thongs are attached at quarter points along the stick to suspend the quiver.[2] It hangs obliquely from the right shoulder, under the left arm, with its mouth pointing up and back. It is adjusted so that the midpoint comes at the waist, and a thong is tied about the body to hold the quiver close to the side.

Comparative Notes

The distribution of two types of basketry will be considered here, the conical burden basket and the bi-conical water bottle. 171 285

Conical baskets are characteristic of California and the adjacent sections of the Great Basin and the Southwest. Without attempting to canvass thoroughly the literature and collections, I find it in California

[1] The Navaho and Apache look on the mountain lion as a hunting god, and its skin is an ornament for warriors (Reagan, MS., 438).

[2] This identical quiver from the Navaho is figured by Mason, 17 *J. Am. Ethn.* Pl. LXXIX, fig. 1. The use of mountain lion skins for quivers is quite widespread in the west, but it may not be universal. [171]

pot at its middle. This is illustrated for the Pima, Yavapai, Havasupai, 171
Mohave, Cahuilla, and Southern Diegueño. Navaho jars are taller 313
and narrow; San Carlos are said to be cylindrical with round to conical bases. Shivwits pottery is also pointed at the bottom.

Perhaps corresponding to the Havasupai custom of cooking corn-
meal mush in the new vessel, the Cocopa cook it, smear it on the vessel, [252]
but throw it away,[1] while the Pima and Papago pour flour paste inside and out of the red hot pot, and the San Carlos coat it with a mixture of clay and *sphaeralcea emoryi*.

The Havasupai pipe is exceptional in having a reed stem fitted in 171
the side of a clay bowl. The nearest form is that of the Diegueño which 276
has the clay of the bowl pinched out at a sharp angle into a short stem.[2] This would appear to be merely a bent tubular pipe were it not for a nipple below the bowl which is suspiciously like that of our own clay pipes. Elsewhere in the Southwest and California the tubular pipe is used; e.g., Navaho, Western Apache, Jicarilla, Luiseño, Washo, Achomawi, and Atsugewi.[3] It is interesting to note that the older pipes of the Cheyenne were straight tubes of bone or stone.[4]

Skins are dressed by the Navaho by a process practically identical 171
with that of the Havasupai. Descriptions from other tribes are so meager 281
that I do not know how far details are similar. Some of the Southwestern tribes at least do not smoke the skins, (Navaho, Havasupai, and Shivwits), others to the north do (Moapa—for whom it is a recently acquired trait,—Kanab, Uintah, Wind River Shoshoni, Paviotso, Achomawi, Klamath and Modoc).[5] Smoking is also general north of the Basin and eastward in the Plains.

Skin dressing is wholly the work of men among the Havasupai, as 171
among Navaho, Yavapai, and Cocopa also. Zuñi men do all the sewing, 291
and as is also customary in other pueblos (Cochiti, Hopi, e.g.) make the
moccasins. In this connection we note that Paviotso men make their 462
rabbitskin blankets.[6] On the other hand, skin dressing and working is a woman's task in the Plains, which suggests that in the Southwest the Pueblo idea of men weaving garment materials has been transferred to the preparation of skins by men of these tribes.

[1] Field notes of [illegible].
[2] [illegible]
[3] [illegible] Washo data from [illegible]
[4] [illegible]
[5] [illegible]
[6] [illegible]

1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

DRESS AND ADORNMENT

Clothing

Both sexes are moderately well clothed, in fact, Garcés was struck in 1776 with their contrast in this respect to the scantily clad Colorado River tribes.[1] A man wears a headband, shirt, breechclout, moccasins, leggings, and in more recent times, trousers. A woman's dress is a short under-apron, a dress consisting of two aprons, a long one worn in front and a shorter one in the rear, moccasins, and blanket. Young children go entirely naked; at six or seven boys are given shirts, and as they approach puberty they don nether garments. Girls assume complete dress earlier than boys. There are no stylistic differences of clothing or hair dressing marking maidens from wives. 291

Children run barefoot. Ordinarily women go barefoot about the camp where the sand is soft, but wear their moccasins to the fields or on journeys. Men, on the other hand, are never without them.

Men usually take pains to avoid exposure. The breechclout is worn at all times, even in the sweatlodge and when bathing. Women are equally careful to retain the under-apron, sleeping, bathing, and in the sweatlodge. The dress fashioned of two aprons is open down the side and exposes its wearer's thighs when seated: the front apron is drawn back between the legs.

All skin clothing is made by men, for the whole skin industry from 294
flaying the carcass to the manufacture of women's dresses[2] is in the 291
hands of the men. 462

The man's shirt (*ałpuwiś*) seems to have been based on the poncho 291
type of the Plains, but only variants resembling European garments are 294
now extant. Cushing observed that the shirt was [177]

> made from a single deerskin, a transverse slit in the center serving as a neck-hole; the sleeves, of two pieces of the same material, heavily fringed, are attached to the edge of the skin, either side of the neck-hole, and open down as far as the elbows. Save the seams at the shoulders and from the elbows to the wrists, no sewing is necessary in this peculiar coat; yet it is made to fit admirably by means of a belt or band, with which the ends falling down front and back are gathered about the waist.[3]

I was told that shirts are also made of two skins sewed together along the straight shoulders and down the sides. True sleeves are inserted. Triangular flaps were added to the neck hole front and back; that in the front is said to have been somewhat the broader. The type now in use

[1] Coues, 455.
[2] Compare the Western Apache (Goodwin, MS. 1938).
[3] Cushing, Ms. 2nd.

[Text continues on p. 185]

1:Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

291
281

Fig. 39 (80.5-1506a,b). A Woman's Dress of Buskskin. a, The front apron; b, The back apron.

1:Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

(almost an additional apron), is arranged to hang in front. A Hopi woven belt is then added as a girdle.

Strings of rattles are tied at various points along the woman's belt. These are small deer or mountain sheep hoofs, or sometimes tubes cut from the leg bones of jack-rabbits, cotton-tails, and wildcats, and in recent times metal jinglers. They are strung on the fringes of a doubled length of skin (Fig. 40b).

The underskirt is a short, somewhat crescentic apron which hangs in front to just above the knees. Like the back apron, it has two extensions for tie-strings. The actual tie is made with a thong which passes

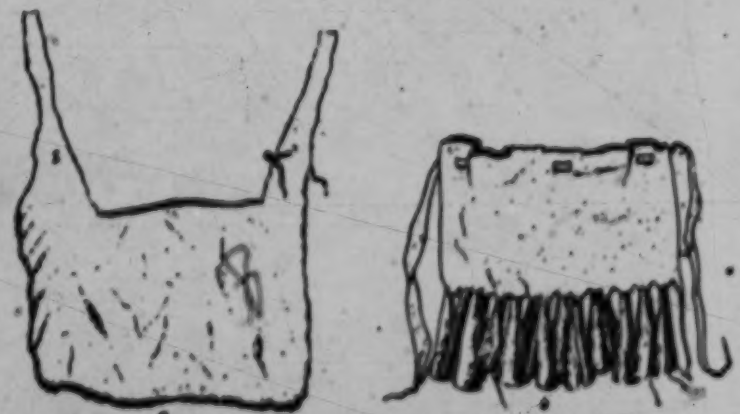

Fig. 40 a (80.2-1862), b (80.2-1862). A Woman's Underskirt and Rattles usually tied to a Woman's Belt.

through both strings. The waist line is hemmed (sewed with a narrow thong in a running stitch), the sides and bottom fringed, and the tie-strings serrated (Fig. 40a).

Small blankets woven of rabbitskins are worn as robes by the women. On occasion a man would wrap a blanket about his body, passing it over the right shoulder and under the left arm.[1] These also furnish bedding. Jack-rabbit (*ápáld*) and cotton-tail (*hálá'o*) skins are cut round and round into long strips. Two of these are rolled together on the thigh into a rope. This is wound to and fro between two parallel rows of pegs, and strings, obtained from the Hopi, are twined through

[1] Clothing is never fashioned of rabbitskins

[Text continues on p. 181]

1:Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

281 this warp at intervals of 8 cm. Blankets are fairly rectangular; speci-
286 mens measuring 78 by 125 cm.; 125 by 140 cm., and a mattress 65 cm. square. The sixty rabbitskins or so necessary for a good-sized blanket are gathered from time to time. The skins are not tanned. Such blankets are quite heavy. Women do not like to go without their shawls,
[291] at least outside the camp, but I doubt that the sentiment is as strong as
[171] at Zuñi.[1]

Hard sole moccasins are the universal footgear.[2] Women sometimes
291 wear the man's type, but their regular style is like that of Pueblo women,
294 with a long upper which is wound around the leg. The man's moccasin

a b

Fig. 43 a (80.3-1778a), b (80.3-1777a). Woman's Moccasins with Ankle Flaps.

consists of two pieces. The sole is made of the neck skin, the thickest part of a deer hide. In all types the sole comes well up the sides and toe, being shaped and puckered. Three styles are used in the upper of men's moccasins (*makdopé*, sing. or pl.). The commonest is a single piece lapping at the outside of the foot, where it is fastened with Navaho
[439] silver buttons (Fig. 41).[3] A short thong is tied through upper and sole at the bottom of the opening for reinforcement. A second type also has a single piece upper, but so cut as to form a short tongue, which the upper laps at the inside of the foot (Fig. 43). The third type resembles that of the

[1] The modern shawl hangs to the knee like that of the Colorado River tribes. It is formed of two handsome woven strips. They sometimes are fitted under the chin. The modern dress is also like that of the river people. An undershirt is commonly worn.

Shoulder strap dress, moccasins, necklace, and basketry plaque are made.

[2] This is the type shown by Wissler, Am. Mus. Nat. Hist. Pap. III, for the Sioux.

1:Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

These specific comparisons show that Havasupai and Navaho alike have one pattern (No. 14) used by both sexes, which differs only in the length of the upper.

Moccasins in this area, like other articles of skin, are frequently colored brown or red. Those of the Zuñi and Navaho are brown; those of Havasupai and Pima are red. In this they differ from the Southern Plains, where, if I recall correctly, the prevalent color is yellow.

Sandals may have occurred more generally in earlier times. They are known to have been in use among the Pueblos, in southern California, and in the regions to the south through western South America. In our own day fiber sandals of identical pattern are made by Southern Diegueño and Shivwits, fiber sandals of undescribed types are made by Cocopa, Cahuilla and doubtless by their neighbors, and low slippers of tule by Paviotso, Athapaskawi, Atsugewi, Klamath, and Modoc. Sandals of hide are made by the Pima, Papago, Cocopa, Southern Diegueño, and Chemehuevi. Those of the Yuma are not described.[1]

Long fringed skin leggings of Plains type are worn by men throughout much the same area as the Plains shirt. Something of the sort was used by Wind River and Lemhi Shoshoni, Uintah Ute, Jicarilla (by implication), Taos, Picuris, Pecos, Mescalero, Mimbreños (?), Western Apache, Yavapai, Havasupai (?), Kaibab, Paviotso, Athapaskawi, and Atsugewi. The Navaho men, and the Havasupai in imitation of them, have a short legging reaching only as high as the knee. This distribution does not extend as far to the southwest as that of moccasins. There is less information about women's leggings, which in the Plains cover only the lower leg. Leggings are noted for Wind River and Lemhi (?) Shoshoni women, and Mimbreños. They were not used by the Paviotso nor the Havasupai. The footless knitted stocking worn by Pueblo women, as at Zuñi, may be a local adaptation. It also seems possible that the puttee-like women's moccasins of this area may be copies of the boot-like moccasins of the Southern Plains.

Overshoes worn over the moccasin when in snow are reported for the Walapai, Havasupai, Navaho, and Zuñi.[2]

Rabbitskin blankets are perhaps universal in the western plateaus, and used in California and throughout much of the northern part of the continent. My notes are somewhat random, but will help to define the distribution: Zuñi, Hopi, Navaho, Havasupai, Walapai, Mohave,[3]

---

[1] e. g., Haeberlin [complete list], [P.] [illegible]
[illegible] Kroeber, [illegible]. Mason, O. T., [illegible]. Tirapel, [illegible]. Barrows, [illegible]. Chittenden, [illegible].

[2] Chamberlain Parkman, [illegible]. Hodge, [illegible]. Mason, O. T., [illegible].

[3] For wearing of a rabbitskin blanket as illustrated by Jacobs, [illegible]. Not according to Kroeber, these are obtained from the Pueblo and Walapai. [illegible].

1: Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

Pima, Southern Diegueño, Luiseño, a people of the vicinity of Santa Barbara, Salinan, Miwok, Southern and Northern Maidu, Shivwits and Kaibab Paiute, Paviotso, Gosiute, Southern (?) Ute, and Northern Shoshoni.[1] There is some variation in the details of manufacture which provides comparative data. The Southern Diegueño and Havasupai warp these upon rows of stakes; the Hopi do not. The Maidu resemble the Paviotso in warping them over two poles.[2]

Descriptions of hair dress are lacking in precision and the situation is somewhat complex. A style consisting of doubling up the long back hair into a knot or queue at the back of the head is common to the Havasupai, Hopi, Navaho, Zuñi, and the Rio Grande Pueblos. Yet there is considerable difference even here: the Pueblos hang the hair over the forehead and cut that at the sides square; the Havasupai, while they too use the bang, wear the hair at the temples long. The Rio Grande Pueblos are said to arrange it behind in two clubs.[3]

Westward of this group the style calls for the bang on the forehead but long hair behind, even artificially lengthened. There appear to be two general styles of treating this back hair. It is simply wrapped without braiding by the Yavapai, Apache-Yuma,[4] Chemehuevi,[5] and Southern Diegueño.[6] On the lower Colorado and Gila the back hair hangs in long plaits or rolls: Mohave, Yuma, Maricopa, Pima, and probably Cocopa.[7] The Maricopa and Pima alternatively arrange it in a club at the back. The Mohave and Walapai, like the Seri, also part it in the middle and allow it to hang loose. The Walapai sometimes wear a braid on each side. Like the Havasupai, the Maricopa and Cocopa have pendent ear locks.

The position of the Western Apache is not clear. The Tonto wore the hair banged at the eyebrows and longer behind, but not to the shoulders, or they cut it short all around. The San Carlos trimmed it, but wore no bang.[8]

[1] Shufeldt, M. C., ibid., 1929; Hough, ibid., 1902; Pinart-Reed Fathers, 1911; Curtis, II, 68; Russell, 1908, 1908; Spier, ibid., 1928; Henshaw, 1908; Yates, 1871; Mason, J. A., ibid., 1917; Powers, 1877, 351; Pope, 1918; Dixon, ibid., 1908 (where the bloomers are used more in the Sierras than in the Sacramento valley); Lowie, ibid., 1909, 210, 217, 220; Hollenbeck, 1911; Chamberlain, ibid., 1909; Lowie, ibid., 1924.

[2] Among the Paviotso weaving is the work of men, but sometimes of women. It would be interesting to know whether this is connected with Pueblo loom weaving, formerly a man's art, or with the manufacture of all clothing by men, as among the Havasupai.

[3] Stephen, 1936; Pinart-Reed Fathers, 1911; Hough, ibid., 1902; Stubbend, ibid., 2nd ed., 80.

[4] "Long matted rolls of false hair behind" (Corbusier, 1886); Bourke, 1891, 111.

[5] Shuffered "by a narrow band, from which it hangs loosely down the back" — or does this mean a headband encircling loose hair? (Whipple, Ewbank, and Turner, 1855; Spier, ibid., 1928.

[6] Hohenthal, 1854; Tripod, 1851; Russell, ibid., 1908; Cleveland, 1891; Henshaw, ibid., 1908; Shufeldt, I, 1922, II, 217, 220; Whipple, Ewbank, and Turner, 1855. The Diegueño, a tribe found in Mexico at the mouth of the Gila in 1540, I, had a similar hairdress (Henshaw, ibid., 1908). Yuki-see, *infra*, are also Luiseño, ibid., 9; Curtis, II, 68.

[7] Stewart, 1918; Hrdlička, 1908, 438.

[8] Bourke, 1891, 111.

171
281
286
291
171
302
[462]

1:Spier E-5 (1918) 1928
NT14 Plateau Yumans NT14
Havasupai

623 plained privately at the end of the speech making. Ultimately about
648 fifty men and women went to the Walapai ceremony.

The repeater, Roger in this case, is invariable when strangers speak formally. Anyone who wishes may perform the function.

171 Garcés observed the same type of formal meeting among the Walapai
623 in 1776.

> On the following day there were arriving bands now of six, now of eight men, he who came at the head of each one of them making his harangue in my presence, and the Jaguallapai captain who was accompanying me responding to them in my behalf. This address of welcome is a custom among them; and at its conclusion each (speaker) turns to his band, asking them if he has spoken well and if that which he has set forth to them has suited them. I observed on this occasion that all of those of the band unanimously responded alike to their respective captains that it was good.[1]

Trade

439 An active trade was conducted with the Navaho and Hopi to the east and with the Walapai and Mohave to the west. In fact, we may properly speak of a northern Arizona trade route from the Hopi to Mohave, independent of more southerly tribes and cut off from those to the north by the Grand Canyon.

[281] The Havasupai are noted for their buckskin among other tribes, according to Cushing,[2] but it must be added that they have no special process of tanning. Their trade with the Walapai was in eastern woven stuffs exchanged principally for raw deer hides, or sometimes tanned skins, and such far western articles as abalone or haliotis shell and the ears of dwarf corn obtained from the Mohave. The skins were tanned at home and carried to the Navaho, Hopi (chiefly at Oraibi), and the few Zuñi met in the Hopi pueblos. Loom products, blankets, sashes, etc., were mostly desired of the Hopi; silverwork, Hopi pottery for storage vessels, stone and shell beads, and buffalo (*tʌwʌ́ʔa*) skins were also obtained. In return they furnished tanned deer, antelope, and mountain sheep skins, shirts and leggings of the same, mescal, piñon nuts, some baskets, and horn ladles which the Hopi flattened and bored for spindle whorls. The Hopi also desired ears of seed corn as long as the forearm from elbow to fingertips. Paiute were also met on the Little Colorado and among the Walapai, but occasionally visited at home. Garcés furnishes interesting evidence of the extent of this trading at the end of the eighteenth century. He found Hopi shirts and Spanish articles from the same source, among the Walapai, where there was a Hopi couple returning home by

[1] Coues, 330–331. Garcés is somewhere between Truxton Canyon and Peach Springs, most likely in Walapai territory. He calls the people Yabipais, but he uses that word for any Yuman-speaking people east of the Mohave.

[2] Cushing, loc. cit.

Hilliff Y-8 (ca. 1901) 1954 NT14 Plateau Yumans NT14
Havasupai

481 move about and the obstacles of precipices and gorges could not stand in the way. They were ingenious in scaling walls, so the employees at the school merely widened the Indians' trails and used them. The men produced a superior quality of buckskin by a 281 process of tanning with the roasted brains of deer and the marrow [237] of the spinal cord. This was a tedious process of scraping, soaking, burying the skin in wet sand and rubbing it between the hands until soft and pliable. From these skins they had made moccasins and clothing for the entire family. But now, "store clothes" were [177] becoming more and more common.

178 Even before the beginning of this century, the tribe's habits and customs were slowly yielding to the pressure of civilization. The clothes they wore, the food they ate, the language they spoke, their very thoughts were undergoing change. Instead of sitting at their grandfather's knee learning the tribe's history and the traditions that had molded the character of the people, their children were now bent over books in the classroom. At the Sunday services they were learning about a new and strange god.

224 But the loss that stirred the deepest resentment was that of their 648 hunting grounds. In this their gods could do nothing. The superstitions and taboos to which a hunter must conform were now nullified by Arizona's game laws limiting the open season, which also restricted the use of charms to that brief period when deer were being slaughtered by the white man's guns. Even the prized [189 calculus (a solid substance obtained from the paunch of a ruminant) 237] carried by the hunter to charm the deer and make it an easy target, lost all value.

The restrictions on their hunting range were brought home to me forcibly the day a forest ranger stopped at my office and said, "I'd like to see the one in charge down here."

"I am in charge," I told him.

He regarded me coldly, then made his accusation: "You permit the Indians to kill deer out of season. It's against the law."

Someone had told. A picture flashed through my mind, one that I had acquired only a day or so previously. In the late afternoon, I

3:James T-8 (ca.1900) 1903
NT14 Plateau Yumans NT14
Havasupai

pean sovereign in the days of despotic power could have worn the "air" of a monarch more regally than Navaho. But it was real with him. His kingship was within himself as well as in the affection of his people.

As might be expected with their powerful physical development, the men are great wrestlers, and often may be seen indulging in friendly, but none the less hard and exhausting bouts, where Havasupai methods of cross-buttocking and other "throws" are tested to the utmost. One of the former teachers was an expert wrestler, — learned doubtless among the Sioux, with whom he used to live as a United States teacher, — and one secret of the influence he had over the Havasupais was his ability to "down" them in a wrestling match. Time and again he had given their best men great "falls," and the more he threw, the more they respected and obeyed him.

As runners and trailers they almost equal the Mohaves, Apaches, and Hopis, though, on the desert, their endurance is not so great as that of these two desert tribes. As canyon climbers, however, they surpass either of them. The climbing muscles, by life-long and constant practice, are remarkably developed, and they run up and down the long, wearisome, steep trails of canyons in a manner to excite the envy of a college athlete, and the astonishment of one who has, but a short time before, laboriously and tediously essayed a brief trip in which ascending or descending a steep trail was an essential feature.

As riders they are skilful and full of endurance, but they are neither as graceful nor as daring as the Navahoes.

Men and women both dress the buckskins for which the Havasupai is so famous. Amole root is macerated

3 James T-8 (ca. 1900) 1903
NT14 Plateau Yumans NT14
Havasupai

and beaten up and down in a bowl of water until a good lather and suds are produced. Then the operator takes a mouthful of the liquid and squirts it over the skin, which he manipulates and softens, rubs, scrubs, and pulls with his fingers and feet, moistening it again and again as occasion requires. Wild catskins are treated in the same way.

From this excellent buckskin the men make moccasins for themselves and their women. The first time I saw Kohot Navaho he was sitting naked, upon a blanket outside his hawa, his three wives near by, they cutting and preparing peaches for drying, he busily engaged making a pair of moccasins. The sole is of two or three thicknesses of heavy rawhide, to which the uppers of buckskin are deftly sewn, with strings of catgut or deer intestines, the holes being made by a bone awl.

Every summer trading-parties of both Hopis and Navahoes come down to the village, bringing blankets, ponies, pottery, and the like, for exchange. In 1898 there were three separate bands of Navahoes and two of Hopis. Trading is a serious process. Laws of barter or sale are first made, before the traders open their packs, and all the people are expected to abide by these loosely promulgated laws without question. Then the hawa of the Havasupai host is turned into a store. Poles are suspended in every possible direction on which to show off the blankets to best advantage. A crowd of chattering men and women stand outside, or, now and again, come inside, during the whole day, and at night-time the men who have done business come in, squat on the ground, and spend the hours in smoking, tale-telling, and gossip.

There is difficulty in the Havasupai mind at trading

3:James T-5 (ca.1900) 1903
NT14 Plateau Tumeum NT14
Havasupai

Some of the skins are dressed with the hair on and are used for clothing, as sleeping mats, or are sold to the travellers at the trains or traded at the stores on the railway. But many of the better skins are carefully tanned and dressed and converted into buckskins, as before stated.

This, indeed, is one of their staple articles of trade, good buckskins fetching as high as five dollars and even ten dollars cash. I have several times seen a blanket for which I had offered eight dollars or ten dollars readily exchanged for a simple buckskin, and it is not an unusual occurrence to note a trade where a fair Navaho pony is given for a large and well-dressed skin.

The outside Indians that the Havasupais are familiar with are the friendly Wallapais, whom they call their cousins, the Hopis and the Navahoes. They have often had wars with the hated Mohaves, Apaches, and Paiutis. The Chemhuevis, Pimas, and Maricopas are their distant, little known, but accepted friends. Far-away Zuni is Si-u, and still farther Acoma is Ac-o-ca-va, and though intercourse with the people of these villages is rare, it has always been friendly.

For the grazing and watering of their horses and other stock each head of a family has a certain region allotted to him, over the boundaries of which he may not allow his stock to wander, except when removing them or by special permission. Manakacha, the head Kohot, takes the range formerly owned or controlled by Captain Navaho, the late Kohot, viz., the region of Black Tanks. Rock Jones (the chief medicine-man) has Topocobya Canyon and the plateau above as far as the other side of the Grand Canyon towards the Mystic Spring Trail, where begins the territory of Vesna, Captain Burro, and

CHAPTER VI

ECONOMIC STATUS AND ROLE

Division of Labor

Economic activities were not in precontact times as sharply sex-limited among the Havasupai as among some primitive groups. It is questionable whether more than two or three kinds of work were strictly limited to one sex or the other. Masculine occupations included hunting, skin dressing, and manufacture of clothing, weapons, and tools. Women gathered wild plant foods, cooked, prepared food for storage, manufactured baskets, pottery and a few miscellaneous articles, and took care of the children. 462

Predominantly Male Activities

Although agriculture was primarily a man's responsibility, all members of the family assisted at every stage. Spier (1928, 188-4) also made this observation. Housebuilding was another task commonly undertaken by cooperative efforts of both sexes, the heavier work being done by men. Trade was carried on by both sexes, although it was primarily the domain of the men.

Men did not weave baskets or make pottery, but members of both sexes occasionally engaged in all other occupations listed. Men were the hunters, but an entire family might help in locating game and driving it toward the hunter. A father sometimes trained his daughter to hunt if he had no son or if she showed inclination or skill in this direction. However, a girl so trained did not hunt independently, and upon reaching adult status she might continue to hunt with her husband, but the ordinarily feminine tasks took precedence as her primary responsibility. [224]

Spier (1928, 168) notes that tanning buckskin "is strictly a sex-limited industry, the handling of the skin from flaying the carcass to the finished moccasin or woman's dress is man's work alone." On the other hand, James (1903, 231), who made a few observations during a brief visit and was perhaps less than an accurate reporter, recorded that "men and women both dress the buckskins for which the Havasupai is so famous." As hunting laws now restrict the number of hides obtainable, only a few men were observed tanning hides. The casualness with which most tasks are undertaken and the delight of sharing work suggest that women may possibly have assisted in the tanning process and perhaps in clothing manufacture, but it is unlikely that women undertook the tanning operation independently. Today, when a man brings a hide to the sweat lodge to rub and stretch it while he gossips, two or three friends may join in this operation, and it may be [114] [224] [281] [474]

[462] that his womenfolk may have assisted in this casual way in former times
[478] when hides were tanned in plentiful supply for trade that would benefit the
[261] whole family.

Clothing manufacture was men's work, and a man cut and stitched for
[294] himself and all his dependents. However, as might be expected, influences
[177] brought a reversal of sex roles in this occupation. Availability of woven
materials and of ready-made clothing brought a change of style also.
Cotton dresses at first were stitched by hand, but today a few women use
[134] treadle sewing machines. Spier (personal communication, 1937) records
that there were a couple of treadle sewing machines in use in 1918. All
men's clothing and much of that worn by women is purchased ready-to-wear.

As mentioned previously, puberty dresses continued to be made by men
as long as they were in vogue, and a few of the older men still know how to
make them.

The art of chipping stone points has been in disuse for so long that
[324] several informants denied that the Havasupai ever made them. One old
[321] man explained that old men in his youth told him that points for arrows and
spears came down to the earth on lightning, fell on trees, and slid to the
ground unbroken for Havasupai use. Another man said that the Havasupai
obtained stone points by picking up those shot at them by Apaches.

At the present time, points of fine workmanship and a variety of types
and sizes may be picked up in the canyon, but younger informants urged me
not to let the older people know I had collected any. As one woman
[775] phrased it, "In the old days they belonged to people who are dead, and it
might bring a ghost around if you handle them." The same request was
made concerning potsherds, which abound in a profusion of types. However,
an archeologist was able to obtain permission to excavate in the canyon a
couple of years later.

Women's Work

Women, exclusively, plaited sleeping mats, while both men and women
braided yucca or tanned hide rope. It is likely that both sexes had a hand
in preparation of materials and fabrication of the rubbed cedarbark slow
match and of braided cotton cord which formed part of the strike-a-light.
Springs and mattresses, hemp or nylon rope, and matches have replaced
these articles, although young boys and men occasionally braid quirts.
[177] Women commonly made rabbitskin blankets, now no longer used, but they
[297] were sometimes assisted by old men. Cradleboards, still used for every
baby, are made by women who also prepare the materials, but a woman
may send her husband to gather willows for this purpose.

7:Spier E-5 (1918/1921) 1929
NT14 Plateau Yumans NT14
Havasupai

then, is the special form which the Havasupai have given to the combined Plains and apron dresses. Even this is not peculiar to them alone, for the Yavapai have an identical costume. Other tribes on the border of mingled distributions have made the combination in other ways; the Kaibab have added a short front apron over the Plains dress, the Navaho linked two squares of cloth in the manner of the Plains dress, while quite another combination is the use of aprons and long dress alternately, as among the Klamath. Here we have illustrations of two kinds of cultural composition, namely combination and duplication.

We may observe another process, the transfer of a technique, in the sex division of labor. All work in skins is in the hands of Havasupai men from the butchery of a deer to the manufacture of a woman's dress. Skin dressing by men was also the custom among the Navaho, Yavapai, and Cocopa. Skin dressing and working in the Plains, on the other hand, is a womanly task, which suggests that in the Southwest the Pueblo idea of men as garment workers has been transferred to another material among their Rancheria neighbors.

Quite another analysis may be made in the case of games. It is possible to show that the moccasin game of the upper Mississippi drainage and the Southwestern hidden ball game, while superficially alike, are so because of convergent development.

To turn to quite another sphere, we find here ownership of fruit trees independent of the ground on which they stand, a feature strongly reminiscent of parts of Melanesia and the west coast of Africa. The factors in this development are obvious. Havasupai ownership of land is really ownership of the produce of the land, which is looked upon as so much personal property. Like other personal belongings, the standing crops are ordinarily cut down and burned on the death of their owner. Fruits (peaches, ultimately derived from Spanish sources, and nuts) were seemingly brought in as personal possessions and maintained as such. It is, then, quite in harmony with Havasupai sentiment toward land produce that the few fruit trees should be looked on as personal belongings to be disposed of by testament or sale regardless of the site they occupy.

12: Cushing E-6 (1881) 1882
NT14 Pueblo Tumuli NT14
Excerpts

Their perceptive faculties

(8) are good, especially relative to simple
151 ideas and actions, or to the believers.
153 They are capable of connecting words with any new idea which they comprehend, and are the most remarkably imitative human beings I ever saw, both by action and with the voice. They would repeat whole sentences, with marvelous truthfulness of sound, in Moqui, Zuñi, Navajo, Spanish, or English, and they manifested a universal passion for acquiring foreign tongues. All these characteristics, together with their striking powers of retention, were shown in the example following: One of them asked me to write the sentence, "Give it to me," in English, Ha-wa-na-pai, and Zuñi. I wrote it, and carefully pronounced it in the three languages, showing him the order of the words. He ran over them a few times, and surprised me a day or two after not only by repeating every word correctly, but by pointing out the different sentences, and even words, which he pronounced. This seemed to argue an appreciation of form as well as of sound and its meaning; in attempting to copy any sentence, however, they would labor patiently, but present a scrawl in which not a mark could be detected that had the remotest resemblance to a single letter in the original.
[212] They did not seem either to be very curious about my writing, or to have the slightest comprehension of it; but would watch and mimic the motions of my hand and pencil in writing, and even the expression of my mouth, then take the pencil, imitate all these things very closely, produce a meaningless scrawl, and gravely read off a ridiculous, usually obscene, rendering of it; seeking my interpreter, and taking infinite pains to have their frivolities very carefully rendered to me in Zuñi.
[522]

●28 They are skilled in manufacturing
46 and using implements, especially in producing raw material, like buckskin, for which they have universal celebrity from the Colorado to the Rio Grande. The

[P 549 9]

12: Cushing I:5 (1881) 1892
NT14 Plateau Yumans NT19
Havasupai

[483
857
752
826

neral punishment of death. Like most other Indians, they have a good understanding of the practice of surgery, and a remarkable knowledge of anatomy.

Labor is not regularly divided, except 440 between the sexes; save that among the men, arrow-making and some such special arts are more practised by those who excel in them than by others, and basket-making among the women. The men do all the hunting, bringing the game to camp, and skinning the larger kinds; the women cutting it up and preparing it for drying or cooking. Both men and women gather the agave plant, in its season, with many festivities, vying in the preparation of it for meal, although the burden of the labor in burning it falls to the women. The men break up the soil, lay out and dig the acequias, etc., performing the heavier agricultural work, as well as the planting, while the women weed the crop and assist in hoeing. When the corn ripens, the women gather it and bring it in, make it ready, and store it in the little stone and adobe granaries under the cliffs, and in little obscure rock shelters. They also cook all foods, make baskets and most other implements of household use, while the men cut out and sew the clothing both for themselves and for the women. Much of the heavier part of the work and drudgery falls on the women, who seem, however, perfectly contented with their really hard lot.

Sedentary agriculturists in summer, 461 the Ha-va-su-pai produce immense quan- 321 tities of datils, mescal, water-tight basket-work, and arrows. Nomadic hunters in winter, throughout the choicest ranges of the Southwest, they have become justly famous for the quantity, fineness, and quality of their buckskins, which are smooth, soft, white as snow, yet thick and durable. These buckskins, manufactured into bags, pouches, coats, and leggins, or as raw material, are valued by other Indian tribes, even as far east as the Rio Grande, as are the

[P 553A]

The/99 cont./
131 inaccessibility of their cañon home has tended to keep them
177 immune from outside influences, so that in many ways their
life is still delightfully primitive. Their typical dwelling
342 consists of a framework covered with brush or tule and some-
times with an outer covering of earth. In summer a four-post
brush shelter is erected, which affords protection from the sun and
allows free circulation of air.

262 The agave plant, cut and prepared in much the same way
as by the Apache, has always been an important article of food
among these people. Other native vegetal foods are grass seeds
224 and piñon nuts. From time immemorial the Havasupai have
(221) been hunters. On the approach of winter they left the cañon for
the upper levels, built wickiups of boughs and bark, and
spent the cold season in hunting. Deer were the principal game,
although they killed some mountain sheep and an occasional black
(251) bear. Much of the venison was cut in thin strips and dried for
237 summer use. Deerskin dressed by the Havasupai was considered
291 the best by all neighboring tribes; consequently, it not only
(489) furnished clothing, but was an important medium of barter. But
the life of the Havasupai has changed. Game is scarce, and
177 224 the Government does not willingly grant them permission to
648 hunt on the surrounding mesas, hence there is little wonder that
the wrinkled veterans long for the old days when game was
plentiful and they hunted where they would. "Now all is
changed," they say. "We cannot go out of the cañon without
asking the white man. We dare not hunt deer, as the game must
be saved for the Hálko. We are no longer men; we are like little
children; we must always ask Washington!"

241 Corn is now their chief staple, besides which they raise
262 beans, squashes, melons, pumpkins, sunflowers, peaches, apricots,
171 and figs. They prepare corn in countless ways, corresponding
252 largely to those of the Hopi. In fact, the modes of preparing
corn by all tribes of /100/ the Southwest are much the same.
Much of the crop is allowed to ripen on the stalk; this is later
ground into meal on the metate. Quantities of green corn are
harvested, roasted in large pits with the husks on, and hung to
dry. This may be ground or simply shelled and cooked, either
alone or with beans, meat, and dried squash. Like the figs, their